

ABSTRACT OF THE DISCLOSURE

A fuel cell system of the invention includes outer-conduit water absorbing members 70 that are arranged outside oxidizing gas conduits 36 of respective unit fuel cells 30 (that is, arranged in an oxidizing gas exhaust manifold M3), and a changeover mechanism 72 that changes over the status of the outer-conduit water absorbing members 70 between an absorption state in which the outer-conduit water absorbing members 70 absorb moisture in the oxidizing gas conduits 36 and a non-absorption state in which the outer-conduit water absorbing members 70 do not absorb the moisture in the oxidizing gas conduits 36. In order to make the outer-conduit water absorbing members 70 absorb the moisture in the oxidizing gas conduits 36, a driving roller 74 is rotated to bring a large number of the outer-conduit water absorbing members 70 arranged in parallel on the surface of a belt 78 into contact with the outlets of the oxidizing gas conduits 36. In order to prevent the outer-conduit water absorbing members 70 from absorbing the moisture in the oxidizing gas conduits 36, on the other hand, the driving roller 74 is rotated to separate the large number of the outer-conduit water absorbing members 70 arranged in parallel on the surface of the belt 78 from the outlets of the oxidizing gas conduits 36. Control of this changeover

mechanism 72 effectively regulates the moisture level in the oxidizing gas conduits 36.